FRBSF WEEKLY LETTER

Number 92-15, April 10, 1992

Monetary Announcements: The Bank of Japan and the Fed

Recessions in the United States tend to be more severe and to last longer than those in Japan. A number of explanations, including greater wage flexibility and more stable employment practices in Japan (Moreno 1992), have been put forth to account for this difference.

A third explanation focuses on the stability and predictability of Japanese monetary policy. Generally, a more predictable monetary policy reduces uncertainty about future inflation. And since inflation is an important component of many economic decisions, reducing inflation uncertainty means that decisions will be revised less often, and economic activity will be less volatile.

The Bank of Japan has consistently demonstrated a strong commitment to fight inflation since the late 1970s. But views differ on whether the perceived stability and predictability of monetary policy in Japan hinges simply on the credibility of this commitment, or whether it also depends on the means through which policy is implemented.

Specifically, it has been argued that the Bank of Japan's monetary "targets" have played an important role in its success. By announcing monetary "targets" in advance, and consistently achieving them, the Bank of Japan may limit the size of destabilizing monetary policy and inflation "surprises," thereby providing an environment more conducive to output stability. This argument also asserts that since the Federal Reserve has adhered less consistently to its monetary ranges, it often "surprises" the economy with unexpected policy actions that intensify economic fluctuations.

In this *Letter* we report the results of a study (Hutchison and Judd 1992) in which we evaluate the information value of the monetary projections of the Bank of Japan (BoJ) and the Federal Reserve (Fed). We find that the BoJ's projections contain relatively little information that could limit the size of monetary policy "surprises," especially when compared with Fed projections. Although Japanese monetary policy has achieved low and stable inflation, and this most likely has contributed to economic stability, we find that the announcement of projections by the BoJ *per se* has not played an important role in this successful record.

Monetary announcements

The BoJ began quarterly public announcements of projected growth in the monetary aggregate called M2 + CDs in July 1978. Although these announcements are cast in the form of annual period projections, they actually extend only one quarter into the future. Each quarter, the base for the new projection is the actual level of M2 + CDs three quarters earlier. Hence, the forecasted annual growth rates are averages of three quarters of realized, and one quarter of projected, money growth.

It has been noted repeatedly by BoJ officials that the announced figures should be interpreted as projections rather than targets. As projections, they represent the BoJ's estimates of the money growth consistent with policy settings (defined in terms of a short-term interest rate) and macroeconomic developments in the past, as well as those anticipated over the next quarter. They are *not* targets because the BoJ does *not* routinely attempt to offset differences between actual and targeted money.

In the U.S., the establishment of ranges for the monetary aggregates first was mandated by Congress in 1975. Monetary ranges have been set for several different monetary and credit aggregates at any one time. Contrary to the Japanese practice, the Fed establishes ranges four quarters into the future, rather than just one quarter ahead. Since 1978, the Fed has established ranges in

February of each year from the fourth quarter of the previous year to the fourth quarter of the current year. Thus while the BoJ permits the base of its ranges to drift each quarter, this generally is permitted only once per year in the U.S.

The Fed's record in meeting these annual ranges has been compared unfavorably with the BoJ's record in meeting its publicly announced projections (Meltzer 1986). These comparisons have been interpreted as suggesting that the BoJ has followed a more consistent and predictable monetary policy than has the Fed during the last 15 years. However, those comparisons are problematic, since the BoJ figures are really one-quarter-ahead projections, while the Fed's ranges extend one year into the future. Moreover, by permitting base drift each quarter, the BoJ frequently allows deviations between actual and projected money growth to become permanent.

Better comparisons

To begin to resolve the comparability problem with the BoJ's "annual" money projections, we turned to the Fed's one-quarter-ahead projections, which are published in the *Records of Policy Action of the FOMC* (Board of Governors of the Federal Reserve System). Between late 1979 and early 1983, these projections were short-run targets for monetary policy. In recent years they have assumed a role that is similar to the role of the BoJ's projections, in the sense that they are growth rates expected to be consistent with a policy defined in terms of "reserve market pressure." The latter concept roughly corresponds to levels of the federal funds rate. Growth rates of the monetary aggregates are projected on the basis of an expected path for interest rates and projections for income prices. Thus these money projections potentially contain useful information about the Fed's policy plans over the next quarter.

But unlike the BoJ's projections, the Fed's projections are not announced to the public while they are in force. Instead, they are published a few days after the FOMC meeting following the one at which they were chosen--a lag of around six weeks.

To make the Fed's one-quarter-ahead projections and the BoJ's projections more comparable, we reconstituted the BoJ figures for M2 + CDs into one-quarter-ahead projections by removing the three quarters of actual data from the "annual" projections. We then compared the accuracy of the BoJ's projections of M2 + CDs with the accuracy of the Fed's short-run (one-quarter-ahead) projections for M1 and M2. (M2 is the most closely comparable U.S. aggregate with the Japanese M2 + CDs.) The U.S. data were grouped into two sample periods: 1980.4–1983.1, when the Fed was targeting M1, and 1983.2–1988.3, when the Fed de-emphasized monetary targeting and focused mainly on M2 as a policy indicator.

Using several standard statistical measures (for example, root-mean-squared error), we found that the Fed was more accurate in some comparisons, and the BoJ did better in others. Overall, the two central banks were quite similar in the accuracy of their projections of money growth.

Information value

However, simply knowing the accuracy of these projections does not tell the whole story of how much they reduce the size of monetary policy "surprises" in Japan, or could reduce "surprises" in the U.S. Assessing the information content of the central banks' projections involves estimating the extent to which they *add* something to forecasts of money growth that could be made on the basis of other publicly available information (such as lagged values of interest rates, prices, and income). In other words, no matter how accurate the central banks' projections are, they will not reduce the size of monetary policy surprises unless they tell the public something it does not already know. Thus, we ask the question, do the central banks' projections improve the public's forecast of monetary policy actions?

To assess empirically the marginal contribution of the central banks' projections, we developed a time-series forecasting model of money growth for the U.S. and Japan, using the information (other than central bank projections) available to the public at the time the forecasts were undertaken. Using this model, we compared the accuracy of our money forecasts with the central bank money projections. Our results suggest that including the BoJ projection in the forecasting model does *not* add significant information useful in forecasting future Japanese money growth. By contrast, the Fed's projections do make a significant contribution to forecasting U.S. money growth over and above the information that was available publicly.

Because of the larger marginal contribution of the Fed's projections compared with that of the

BoJ, the information content of the Fed's unannounced projections is far greater than the publicly announced BoJ projections. In particular, the reduction in the standard error of money surprises associated with the Fed projections is about 1½ percentage points (annual growth) versus less than ½ percentage point for the BoJ projections.

Conclusions

Our analysis suggests that the Fed's projections provide three times more information value to the public than do the BoJ projections. The BoJ projections per se seemingly provide little information about future money growth beyond what is easily derived from alternative, and readily available, sources of information.

We are left with the somewhat paradoxical result that the projections that are *not* immediately disclosed (the Fed's short-term monetary paths) potentially are valuable in reducing monetary policy surprises, while the projections that *are* immediately disclosed (the BoJ) provide relatively little new information to the public.

Thus it appears doubtful that the BoJ monetary announcements per se have materially reduced the size of money surprises or contributed significantly to inflation and output stability in Japan. Rather, the steadfast commitment of the Bank of Japan to an objective of low inflation over the long run, despite changing economic and political circumstances, seems a more fundamental reason for the excellent performance of the Japanese economy.

Michael Hutchison
Associate Professor,
University of California,
and Visiting Scholar, FRBSF

John P. Judd
Vice President and
Associate Director
of Research

References

Board of Governors of the Federal Reserve System. *Federal Reserve Bulletin,* various issues.

Hutchison, Michael, and John P. Judd. 1992. "Central Bank Secrecy and Money Surprises: International Evidence." *Review of Economics and Statistics* (February).

Meltzer, Allan H. 1986. "Lessons from the Experience of Japan and the United States under Fixed and Floating Exchange Rates." *Bank of Japan Monetary and Economic Studies* (October).

Moreno, Ramon. 1992. "Japan's Recessions." *FRBSF Weekly Letter* (March 6).

Research Department
Federal Reserve
Bank of
San Francisco

P.O. Box 7702
San Francisco, CA 94120

Index to Recent Issues of *FRBSF Weekly Letter*

DATE	NUMBER	TITLE	AUTHOR
10/25	91-37	Earnings Plummet at Western Banks	Zimmerman
11/1	91-38	Bank Stock Risk and Return	Neuberger
11/8	91-39	The False Hope of the Narrow Bank	Pozdena
11/15	91-40	The Regional Concentration of Recessions	Cromwell
11/22	91-41	Real Wages in the 1980s	Trehan
11/29	91-42	Solving the Mystery of High Credit Card Rates	Pozdena
12/13	91-43	The Independence of Central Banks	Kim
12/20	91-44	Taxpayer Risk in Mortgage Policy	Martin/Pozdena
1/3	92-01	The Problem of Weak Credit Markets	Parry
1/10	92-02	Risk-Based Capital Standards and Bank Portfolios	Neuberger
1/17	92-03	Investment Decisions in a Water Market	Schmidt/Cannon
1/24	92-04	Red Ink	Zimmerman
1/31	92-05	Presidential Popularity, Presidential Policies	Walsh/Newman
2/7	92-06	Progress in Retail Payments	Laderman
2/14	92-07	Services: A Future of Low Productivity Growth?	Schmidt
2/21	92-08	District Agricultural Outlook	Dean
2/28	92-09	The Product Life Cycle and the Electronic Components Industry	Sherwood-Call
3/6	92-10	Japan's Recessions	Moreno
3/13	92-11	Will the Real "Real GDP" Please Stand Up?	Motley
3/20	92-12	Foreign Direct Investment: Gift Horse or Trojan Horse?	Kim
3/27	92-13	U.S. International Trade and Competitiveness	Glick
4/3	92-14	Utah Bucks the Recession	Cromwell

The *FRBSF Weekly Letter* appears on an abbreviated schedule in June, July, August, and December.